

C-RAM KFS

Lossy magnetic UHF silicone casting resin

Description

C-RAM KFS is a two part liquid RTV silicone based casting resin absorber, primarily for UHF and lower microwave bands. When cured, it converts to a flexible high temperature silicone rubber.

C-RAM KFS will adhere to itself and to most other silicones. It will release well from most other substrates unless an adhesion primer is used.

C-RAM KFS is used to mold loads and intricately contoured parts used for attenuation of signals and suppression of standing waves and RF noise, or to provide a lossy RF gasket. Pre-molded sheets of KFS are available as C-RAM FDSS.

Typical cured properties

Specific gravity	3
Thermal expansion:	$35 \times 10^{-6}/^{\circ}\text{F}$
Thermal conductivity, BTU-in/hr-ft ² -°F:	4.0
Service temperature range:	-80 to +400°F
Water absorption:	<0.1%
Dielectric strength, volts/mil:	>100
Attenuation:	
1 GHz	15 dB/cm
3 GHz	24 dB/cm
8 GHz	50 dB/cm

Mixing and use

Prepare mold or cavity to be filled. If adhesion is desired, use a thin coat of primer. In molding operations where excellent release is required, a wax mold release will be beneficial.

Kits are supplied as Part A (silicone resin plus filler) and Part B (curing agent). Stir the contents of Part A, preferably using a power mixer, to disperse any settled filler.

Measure out the material required, combine parts A and B in the portions listed below.

Mix the two parts thoroughly preferably using a power mixer. Pot life is approximately 1 hour.

Part A (parts by weight): 100
Part B (parts by weight): 1.75

Best results are obtained by vacuum deairing the mixture. Pour the material into the prepared mold or cavity, taking care not to trap any air.

Cure the material at room temperature overnight, or at 175°F for three hours. At usage temperatures above 250°F a post cure at or above the usage temperature for approximately eight hours is recommended.

Availability

C-RAM KFS is available in two-part kits in the following sizes:

3 lb. pint
6 lb. quart
25 lb. gallon
Shelf life is at least 6 months when stored in unopened containers.

All recommendations, statements, and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. User shall rely on his own information and tests to determine suitability of the product for the intended use and assumes all risks and liability resulting from his use of the product. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller.

Printed in the U.S.A.

Cuming Microwave Corporation

Engineered Materials
264 Bodwell Street
Avon, MA 02322
Telephone +1 (508) 521-6700
Fax +1 (508) 584-2309
www.cumingmicrowave.com
Made in the USA
Issue Date: 05/23
Supersedes: New
Lit: #4855